



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,603	12/11/2003	Thomas Woodrow Wilson III	4022-000016	8214

27572 7590 10/04/2005

HARNESS, DICKEY & PIERCE, P.L.C.  
P.O. BOX 828  
BLOOMFIELD HILLS, MI 48303

EXAMINER

SANDERS, KRIELLION ANTIONETTE

ART UNIT PAPER NUMBER

1714

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/733,603

Applicant(s)

WILSON, THOMAS WOODROW

Examiner

Kriellion A. Sanders

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/03, 11/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 54-60 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1. The claims are indefinite in their recitation of abbreviations to describe the components, S, TBzTD, MBTS. The claims must define the metes and bounds of the invention and so should indicate the exact terminology for these components.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1-7 and 9- 43 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Wilson, III, US Patent No.6620871.

Applicant's invention pertains to a rubber composition comprising:

1. Natural rubber, synthetic rubber or mixtures, such as butyl rubber, halogenated rubbers and millable polyurethanes
2. A curing agent

Art Unit: 1714

3. A silica filler
4. A non-petroleum oil having fatty acid side chains wherein at least half of the side chains are unsaturated, such as
  - a. Castor oil

The composition may additionally comprise a sulfur curing agent.

The composition may additionally comprise a metal alkoxy compound, wherein the metal is

- i. Titanium
- ii. Zirconium
- iii. A chelate

Claims 16-27 are directed to a rubber composition wherein the rubber is cured and articles made therefrom such as a shoe.

Claims 28-33 relate to a method for producing a rubber footwear article.

Claims 34-53 and 60 relate to a shoe having a component made from the presently claimed rubber composition.

Wilson, III discloses a moldable rubber composition containing a synthetic or natural rubber, conventional curing agents, and an auxiliary composition containing titanium or zirconium compounds. The titanium compounds of the invention have at least one alkoxy group bonded to titanium, and zirconium compounds of the invention have at least one alkoxy group bonded to zirconium. In preferred embodiments, the auxiliary composition contains chelates of the titanium or zirconium compound.

Art Unit: 1714

The rubber resin of the patented invention may be selected from the group consisting of natural rubber, synthetic rubber, and mixtures thereof, wherein the synthetic rubber comprises a backbone comprising repeating olefinic unsaturation. The composition additionally contains a sulfur containing curing agent and an auxiliary composition comprising petroleum wax.

Suitable amounts of metal compounds are expressed as 0.01-10 phr resin of a metal compound selected from the group consisting of a titanium compound with at least one alkoxy group -OR bonded to titanium, a zirconium compound with at least 1 alkoxy group OR bonded to zirconium, and mixtures thereof. 0.01-10 parts per hundred resin of a metal compound selected from the group consisting of a titanium compound with at least one alkoxy group --OR bonded to titanium, a zirconium compound with at least one alkoxy group -OR bonded to zirconium, and mixtures thereof, wherein R comprises an alkyl group of 8 or fewer carbon atoms. Examples of the metal compound include titanium acetylacetonate and zirconium acetylacetonate.

The patented composition further includes a carrier that comprises silica, wherein the carrier comprises carbon black or wherein the carrier comprises titanium dioxide. The patented composition may further 40 to 48 phr silica filler and/or a petroleum wax.

The patented invention further calls for a method for producing a rubber footwear component, wherein the molded rubber article is a shoe outsole, comprising mixing a moldable rubber composition comprising a rubber resin selected from the group consisting of natural rubber, synthetic rubber and mixtures thereof, wherein the synthetic rubber comprises a backbone comprising repeating olefinic unsaturation a sulfur containing curing agent; and a metal compound. The patented invention includes less than 3 phr of a non-petroleum oil. The

Art Unit: 1714

iodine number is considered to be an inherent property of the compositions since the components of the patented invention are essentially the same as applicant's, the properties of the composition are expected to be the same as applicant's composition. See the entire document.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1- 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson, III, US Patent No.6620871 as applied to claims 1- 43 above and further in view of Teratani et al, US Patent No. 5001185 and Hakuta et al, PG PUB- No.: 20030096904.

4. Teratani et al discloses a rubber composition comprising 20-130 parts by weight of carbon black and 1-30 parts by weight of at least one resin obtained by adding amine as a curing agent for resin to a novolak type phenolic resin modified with at least one of animal oil, vegetable oil, unsaturated oil, aromatic hydrocarbon and nitrile rubber for the provision of self curability, based on 100 parts by weight of at least one rubber selected from polyisoprene rubber (inclusive of natural rubber), polybutadiene rubber and styrene-butadiene copolymer rubber. According to the patented invention, additives usually used in rubber industry include sulfur, vulcanizing agent, vulcanization accelerator, antioxidant, silica and process oil. See col. 3, lines 19-24. Since these components are conventional their inclusion in the Wilson, III rubber

Art Unit: 1714

compositions, (particularly the inclusion of the specific oils of Teratani et al), would have been obvious to the ordinary practitioner of this art.

Hakuta et al teaches castor oil to be an effective dripping inhibitor for rubber compositions. See paragraph 0569. Incorporation of the conventional castor oil into the compositions of Wilson, III to function as dripping inhibitor would have been an obvious variation to one of ordinary skill in the art absent a clear showing of unexpected results attributable to the specific oil employed.

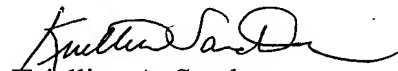
Furthermore, since Wilson, III indicates that conventional curing agents may be used to cure the rubber compositions, and Hakuta et al teaches castor oil to be an effective dripping inhibitor as well as a filler for rubber compositions, it would have been obvious to use any conventional curing agent including those of the peroxy type, absent some clear showing of unexpected results attributable to this selection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kriellion A. Sanders whose telephone number is 571-272-1122. The examiner can normally be reached on Monday through Thursday 6:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1714

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kriellion A. Sanders  
Primary Examiner  
Art Unit 1714

ks